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American School
of Classical Studies
at Athens

OENIADAE

V

A GREEK BATH

DURING the course of the excavations at Oeniadae in December, 1900, an opportunity was afforded for an examination of such remains of the city as still appear above ground. This resulted in the discovery, among the bushes at the southern extremity of the eastern fork of the harbor, of what appeared to be a portion of a small, circular building. Since this was the lowest part of the city, and the depth of earth appeared greater than elsewhere, we hoped to find the remains in a well-preserved condition, and work was therefore at once begun at this point. Owing, however, to the boggy condition of the soil, caused by its close proximity to the marsh, in which there is always more or less water, and to the heavy rains which soon set in, we were forced to discontinue our work for the winter, having merely discovered the circuit of the wall and a number of wedge-shaped blocks of white limestone, scattered haphazard in the enclosure.

With the resumption of the excavations in May, 1901, work was immediately begun on this building, which had become comparatively dry during the spring, and in a few days we stood upon what had once been the floor of a circular room. This had been composed of the scattered limestone blocks just referred to, but later had become badly broken and disarranged. In addition, while digging a trench around the outside, we dis-

covered that this was not, as we had at first supposed, a separate building, but that it was merely one of a series of connected rooms, all of which were probably used for bathing purposes, as the description will show. Unfortunately, even in May, the influx of water greatly hindered the work, so that

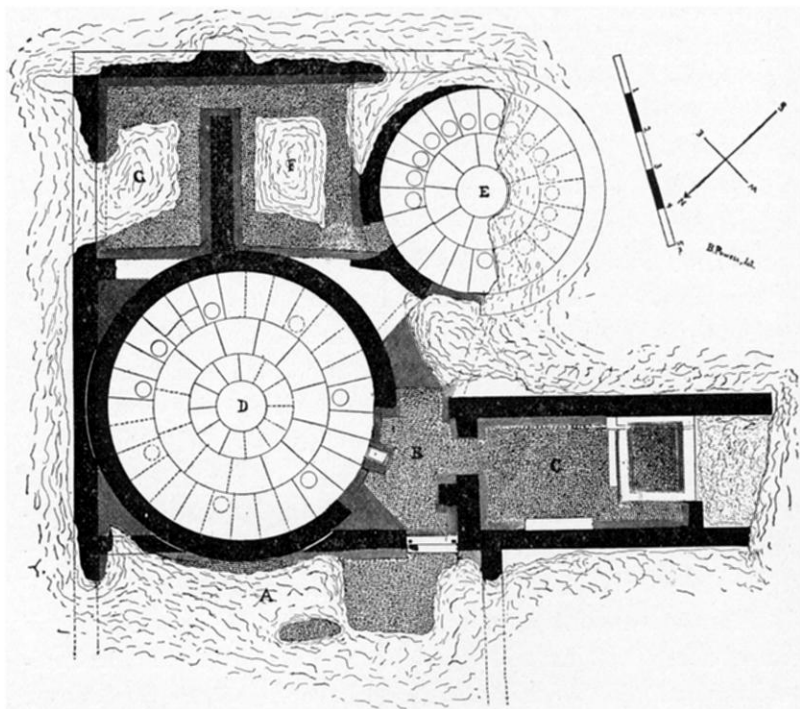


FIGURE 42.—PLAN OF GREEK BATH AT OENIADAE.

the excavations were not as thorough as would have been the case had the conditions been more favorable. Enough earth and mud, however, were removed to permit the drawing of what, it is hoped, will be an intelligible plan (Fig. 42). Whether this bath-house was connected with another building or was a complete structure in itself must be left in doubt until further excavations are made toward the north, during some exceptionally dry season.

As may be seen from the plan, the entrance to the baths was through room A, but whether this room ended the building in this direction cannot at present be determined. As this room is lower than any of the others,¹ and likewise nearer to the marsh, we were able to tap the mud in only a few places, which were almost immediately filled again with water. It was possible, however, to ascertain the width of the room (9.20 m.), and also the construction of its walls and pavement. The walls were constructed of large but rather roughly hewn blocks of hard, gray, native limestone, and were 0.54 m. thick. The inner face of the wall was left very rough, and to this a coating of coarse plaster, several centimetres thick, was applied. Close along the base of the walls ran a band of hard, gray cement pavement about 0.25 m. in breadth; while the large central space was covered with a carefully smoothed and polished mosaic pavement, composed of irregularly shaped bits of white limestone laid in cement. Fortunately this pavement, here as well as in rooms B, C, F, and G, is almost perfectly preserved, and although it shows no pattern, it is a splendid specimen of Acarnanian workmanship. Of the use of room A one can, of course, not be certain, the arrangements to the north being unknown, but it probably was the apodyterium, or disrobing room, which was usually included in the bath-house.²

From the southwest corner of room A one passed through an opening 1.32 m. wide, which, from the holes in the limestone threshold, we may assume to have once been closed by a wooden door, into what seems to have been the bath proper. The first step of this threshold is 0.06 m. above the floor of room A, and the second step is 0.04 m. above the first; the height of the second step above the floor of room B is 0.03 m. One entered a small, irregularly shaped hallway, or anteroom (B on plan), from which three other doorways opened out into the various divisions of the bathing establishment. Like A, B was paved with mosaic in the middle, with a border of cement close to the walls.

¹ 0.07 m. below floor of hallway, B on plan.

² Lucian, *Hipp.* 8.

Passing through this hallway, one proceeded through a doorway on the right, only 0.92 m. in width, into room C, which is about 5.35 m. long and 2.85 m. in width, and is paved with mosaic, as were the preceding chambers. At the farther end of this room and opposite the doorway was a *πύελος*, or bath-tub,¹ whose south and west walls were built up against the



FIGURE 43.—BATH AT OENIADAE. FRIGIDARIUM FROM SOUTHWEST.

walls of the room itself. This tub, a good idea of which is given by Fig. 43, was formed by constructing four low walls, which served as the sides of the tub, on the mosaic floor of the room. The sides which project into the room taper up slightly from a base 0.42 m. in thickness, and are rounded on top. They are composed of a core of tiles laid in cement, all of which is covered with a fine stucco. The four sides enclose a

¹ I believe this to be the only existing specimen of the *πύελος*, which is mentioned by *Schol. Aristoph. Equit.* 1060; *Poll.* VII, 166-168; *Diog. Laert.* X, 15.

space about 0.70 m. in depth, which enlarges from 1.135 m. by 1.61 m. at the bottom to 1.30 m. by 1.97 m. at the top. The bottom of the tub, as may be seen from Fig. 43, was formed by the mosaic flooring of the room. In this tub there were originally only two openings, one in the southwest corner, about 0.08 m. square and about 0.50 m. above the floor; while on the north there was another level with the floor. The former probably admitted the water to the tub, the latter allowed it to escape. The floor of the tub sloped from south to north, the outflow of the water being thus facilitated. In later times, the eastern wall was also pierced close to the wall of the room, and another outlet made there about 0.20 m. above the bottom of the tub. In addition to the *πύελος*, the room contained little except a seat, or step, along the eastern end of the tub, about 0.22 m. high; this was covered with stucco. Along the northern wall of the room was another step, 0.28 m. high and 1.75 m. long, which could have been used only as a seat for the bathers (Fig. 44). This room with the large tub was probably the frigidarium, since the arrangements indicate nothing as to heating; the tub was probably used as a cold plunge.

According to Vitruvius,¹ the water from the frigidarium should flow into the tepidarium, and, if we may assume this to have been the case here, we have a tepidarium in room D, for the waste water from the *πύελος* flows down the inclined floor of C² and across the hallway into it. This room (D), which was the first excavated, was, as I have said, circular, and paved with slabs of white limestone; its diameter is 6.80 m. These slabs, which are wedge-shaped, were arranged in concentric bands about a central circular slab. The central slab is here lacking, but undoubtedly was similar to the one found in E, and on it probably rested a brazier with a *χάλκωμα* (or large

¹ Cf. Vitruv. *De Arch.* V, 10. Vitruvius probably means that the water should go through pipes, and it is difficult to reconcile the arrangement at Oeniadae with his description, for no means of heating water, or drains for waste water, were discovered.

² This floor has a fall of 0.05 m. from the tub to the door.

kettle full of boiling water covered with a $\pi\acute{\omega}\mu\alpha$), by which chambers of this kind were heated.¹ Around this slab were arranged eight basins, cut in the slabs forming the floor, 0.37 m. in diameter and 0.215 m. deep, at a distance 0.80 m. away from the wall. The arrangement of the basins and of the blocks in which they were cut can best be seen on the plan. The blocks nearest the walls were 1.19 m. long, those

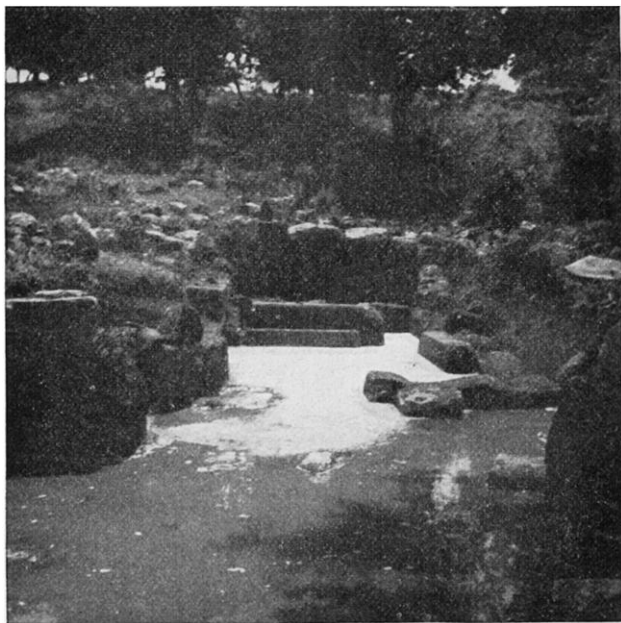


FIGURE 44.—BATH AT OENIADAE. FRIGIDARIUM FROM NORTHEAST, LOOKING THROUGH DOORWAY OF TEPIDARIUM.

next were 0.87 m., while the third or innermost were 0.68 m. All the plaques varied between 0.22 m. and 0.26 m. in thickness, and were so arranged as to incline very gently (0.015 m. in all) toward the centre. The walls of this room, like those of others, were 0.54 m. thick, but were made of soft, not hard, limestone, probably so as to better retain the heat. Furthermore, they were carefully joined together, and the stucco used

¹ Plutarch, *Demetrius*, 24, 3.

was of a much better quality than that used in room A, although not as fine as that in the *πύελος*. As may be seen from the photograph (Fig. 45), the walls still stand a metre or more in height, and are by far the best preserved in the entire structure. The view is taken through the doorway, 2.61 m. in width, in the foreground of which appear the remains of a

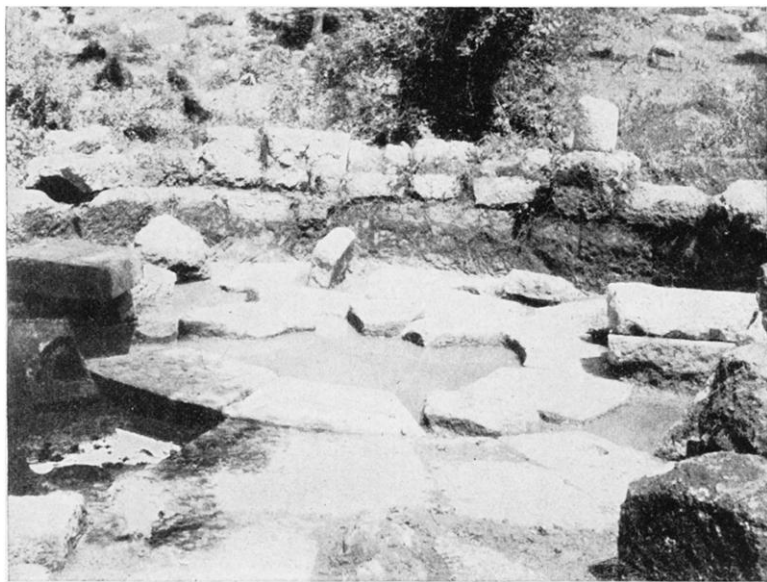


FIGURE 45.—BATH AT OENIADAE. TEPIDARIUM FROM SOUTHWEST.

limestone doorpost almost in the centre of the opening, probably used to support two swinging doors for those entering and leaving the room.

Returning from room D into the hallway, one passed up a short inclined passage, floored with cement, into another circular chamber (E). While it generally resembles the tepidarium, it is only 5.23 m. in diameter; likewise the doorway is only 1.28 m. in width. The pavement, however, corresponds almost exactly, except that here there are only two rows of slabs. The cups in the floor were slightly smaller, 0.34 m. in diameter and 0.14 m. deep, and, where in the other room some

slabs were left uncut, here, so far as uncovered, every plaque in the central row had a basin with the exception of those close to the doorways. We may, I think, assume that there were seventeen here as compared with eight in the other room, these being 0.83 m. away from the wall and 0.10 m. apart. Whatever these basins were originally intended for, their use seems to have been changed at some later date, for when uncovered each was found with a closely fitting circular tile so set in as to be flush with the floor. We removed one tile and found bits of tile and cement completely filling the receptacle. Otherwise the construction is the same as in D, the walls being of soft stone, 0.54 m. thick, and covered with the same kind of stucco.

What these cups were originally intended for is not known. No reference is made to anything of the kind in any of the ancient writers, nor are any others extant with the exception of some at Eretria,¹ the purpose of which is, I believe, equally unknown. The most probable use seems to me to be that, taken in conjunction with the rooms in which they are situated, they formed part of the heating apparatus. The baths, where pipes were not used, were usually heated by a brazier, above which was a cauldron of hot water. Why could not these basins have been filled with hot water from the cauldron so as better to diffuse the heat? In room D we have a large room and eight basins; in room E, although the room is smaller, we have seventeen basins. As I have before said, the walls are of soft stone, evidently in order to retain the heat better, and assuming D to be the tepidarium, E, being smaller, would naturally be more easily heated, and if the basins in the floor were used for heating, this could be accomplished much more easily.

¹ While in Eretria in the fall of 1900, I examined some baths of the Roman period, then newly excavated by Dr. Kourouniotes of the Greek Archaeological Society. The chambers there were circular, and similar basins existed, except that they were arranged in front of fixed seats. I believe they are as yet unpublished. There is a brief mention of these baths at Eretria in the *Am. J. Arch.*, Second Series, vol. V, 1901, p. 96.

Assuming these rooms to be the tepidarium and caldarium, the two smaller rooms, F and G, to which another narrow doorway from E gave access, must be the *ἐλαιοθήσια*, or anointing rooms, which are described as the necessary adjuncts of a bath.¹ A detailed description of these rooms is unnecessary, as their construction was the same as that of the other rooms, with mosaic floors. They, however, possess one remarkable feature, namely, the floors incline toward the north and the cement border there is slightly depressed, possibly to form a kind of gutter into which the oil and dirt could be the more easily swept, owing to the incline.

As to the upper structure of these rooms, no traces remain. The circular rooms, however, were possibly like those described by Vitruvius,² which for purposes of ventilation had at the apex of the conical or dome-shaped roofs a circular hole that could be opened or closed by means of an *ὀμφαλός*; this could be drawn up or down, according to the temperature desired. True, he speaks of Roman baths, but this seems also to have been the common method in Greek times.³

At what period these baths were constructed is difficult to say, as we know so little about the construction of Greek baths, and nothing at all about building methods in Acarnania and Aetolia. That the baths were built under Roman influence I can scarcely believe, first, because they are unlike the usual Roman bath, both in arrangement and manner of heating, and secondly, because their construction seems rather Greek than Roman. Herodotus says that hot baths were used in his time, and mention is frequently made of them in later literature.⁴ The coarse plaster affixed to the rough walls is not necessarily Roman, for we have the same in the ship-sheds at Oeniadae, and they were unquestionably constructed in Greek times. Also, unlike the mosaic in the baths which I have mentioned at

¹ Vitruv. V, 11, 2.

² Vitruv. V, 10, 5.

³ Cf. Timarchus in Athen. XI, 501; also Eratosthenes (*ibid.*) says: τῶν γὰρ φιαλῶν οἱ ὀμφαλοὶ καὶ τῶν βαλανείων οἱ θόλοι παρόμοιοι.

⁴ Herodotus, IV, 75; also Aristotle, *Probl.* II, 29-32.

Eretria, which was unmistakably Roman, the mosaic here is not at all unlike the mosaic found in the baths of the Greek gymnasium at Eretria.¹

The various small objects found in the various rooms in no wise tend to disprove the Greek origin of this bath-house, but,

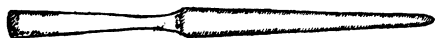


FIGURE 46. — SPEAR-HEAD FROM THE BATH AT OENIADAE.

on the other hand, tend to affirm it. The iron spear-head, shown in Fig. 46, was found in E, and is 0.226 m. long, but gives no clew as to the date of its manufacture. Likewise, it is impossible to judge from the fragment of an arm of natural size, broken just above the elbow and at the wrist; the material of this is a very coarse-grained marble. The two fragments

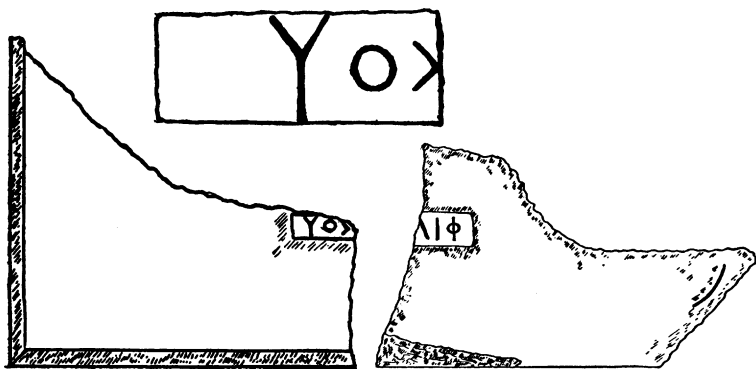


FIGURE 47. — STAMPED TILES FOUND IN THE BATH-HOUSE.

of roof-tiles, shown in Fig. 47, both in retrograde, one having the beginning, the other the ending of some proper name, in letters about 0.015 m. high, should, from the forms of the letters, date from the end of the third century B.C. In addition to these fragments, five coins were found in the *πύελος*. They are the ordinary copper coins of the city, and date from

¹ *Am. J. Arch.*, First Series, XI, p. 152.

230 to 168 B.C.¹ Thus, taking everything into consideration, although of course, these small objects prove nothing satisfactorily either way, it seems safe to say that these baths were constructed under late Greek rather than under Roman influence.

JOSHUA M. SEARS, JR.

¹ *British Museum Cat.*, "Thessaly to Aetolia," p. 189. Type: obverse, head of Zeus, laur., R. ; reverse, ΟΙΝΙΑΔΑΝ, bearded head of bull-headed man, *i.e.* river Achelotus, R.